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Roger Claff, P.E. Sr. Environmental Scientist

February 10, 2006

United States Environmental Protection Agency Office of Emergency Management Regulatory and Policy Division (5104A) Ariel Rios Building 1200 Pennsylvania Avenue Northwest Washington, DC 20460

Dear Sir or Madam:

The American Petroleum Institute (API) is pleased to offer these comments on the U.S. Environmental Protection Agency's (EPA's) draft Spill Prevention, Control, and Countermeasure (SPCC) Guidance for Regional Inspectors (Guidance), released by EPA on December 2, 2006 (http://www.epa.gov/oilspill/guidance.htm). API represents over 400 member companies involved in all aspects of the oil and natural gas industry, including exploration, production, refining, transportation, and marketing of crude petroleum and petroleum products. There are approximately 150 petroleum refineries, over 2000 marketing terminals and bulk storage facilities, and over 100,000 oil and gas production facilities in the United States, its territories, and Puerto Rico potentially affected by the SPCC Rule and this Guidance.

API appreciates EPA's efforts to develop the Guidance document and address many of the concerns raised by API with the 2002 SPCC rule. API recognizes the substantive progress that has been made since that time. The Guidance addresses many of the technical ambiguities API has pointed out in previous comments to EPA, and provides much needed clarification. API has a number of concerns about the Guidance, however, discussed below, as well as detailed comments on the specific text of the document, provided in the attached.

The Guidance should be revised throughout to provide a clear and consistent description of the inspector's role, and the constraints of that role.

The SPCC Rule is intended to be performance-based, allowing flexibility in meeting the rule requirements to prevent discharges of oil to navigable waters and adjoining shorelines. For that flexibility to be realized in practice, the EPA inspector, the Professional Engineer (PE), and the owner/operator must act in accordance with their roles under the rule. The owner/operator is responsible for plan implementation and facility compliance, and in such effort enlists the PE to review and certify that the SPCC plan is prepared in accordance with good engineering practice, considers applicable industry standard(s), and complies with the SPCC requirements.

The EPA inspector is responsible for verifying that the SPCC plan is complete, that the plan has been implemented, and that both the plan and its implementation are in compliance with the SPCC rule. The inspector should note whether the alternative measures meet the standards of common sense, and appear to agree with recognized industry standards or, where such standards are not used, are in accordance with good engineering practice. If controls and procedures are certified by a PE, properly documented in the Plan and are appropriately implemented in the field, they should generally be considered acceptable by the EPA inspector.

If the inspector questions the appropriateness of alternative measures in a given circumstance, he/she should fully document all observations and other pertinent information for further review by the EPA regional staff. Follow-up action by the EPA inspector may include requesting additional information from the facility owner or operator on the implementation of the alternative measures.

The Guidance should document this delineation of the roles of the inspector, PE, and owner/operator, and throughout the document should link inspector activities to the proper role and function of the inspector.

The Guidance often inappropriately suggests that the inspector go beyond a practical common sense verification of the judgment and expertise of the PE. The Guidance should not attempt through the inspector to establish as requirements any standards or recommended practices that are beyond what is required by the SPCC rule.

The Guidance specifies numerous recommended practices for the inspector. The clear impression is that the inspector must verify that these practices are being met, even though they are not required under the rule. For example:

- In Section 3.1, the Guidance specifies monthly inspections of certain shop-built containers, even though the PMAA settlement agreement (Petroleum Marketers Association of America, et al, v. Michael O. Leavitt and United States Environmental Protection Agency, Civil Action No. 02-02249 Settlement Agreement) allows the PE to establish the frequency in accordance with good engineering practice.
- In Section 4.2.8, the Guidance provides a generic and unsupported criterion for homogeneity when evaluating whether a native soil is sufficiently impervious. This criterion is not specified in the SPCC rule and may be misapplied by the inspector in the field to override the expert judgment of the PE as documented in the plan.
- The language in Section 4.2.4 of the Guidance strongly advocates the use of a 25-year, 24-hour storm event in establishing sufficient freeboard for secondary containment, notwithstanding the fact that SPCC rule allows the PE to establish the freeboard based on industry practices and good engineering judgment. The language in Section 4.2.4 may mislead the inspector into overriding the expert judgment of the PE as documented

in the plan, in favor of enforcing a 25-year, 24-hour storm event as though it were a requirement of the SPCC rule.

The Guidance should clearly distinguish between the requirements of the SPCC Rule, which the owner/operator must meet in order for the facility to comply, and recommended practices that may go beyond or may be more stringent than the requirements of the Rule. The role of the inspector should be clearly stated as one of verifying compliance with the SPCC Rule alone. The Guidance should not include ambiguous recommendations or partial information, so that the inspector is misled into inappropriately overriding the expert judgment of the PE.

API requests that EPA address our concerns as detailed above, and as documented in the attached.

API appreciates the opportunity to comment on the Guidance. Should you have any questions concerning our comments, please contact me.

Sincerely,

Roger E. Claff, P.E.

Va E. Cly

Senior Environmental Scientist

cc: C. Matthiessen, EPA Oil Program Center

Chapter 1 Introduction

Chapter 1 Introduction

1.2 Regulatory History

1.2.5 Compliance Date Amendments (Page 1-8)

API Comment

In accordance with EPA's final rule of August 11, 2004 [69 FR 48794], the compliance date extension pertains to the new or more stringent requirements of the July 17, 2002 rule. In spite of this statement, EPA still insists that the compliance date for certain more stringent requirements is not extended, for example, for requirements pertaining to cathodic protection of underground piping (see comment, Section 3.4.2, Table 3-3).

API Recommendation

API recommends that EPA confirm its statement that the compliance date for all new or more stringent requirements of the July 17, 2002 rule is extended to October 31, 2007.

Chapter 2: Applicability

2.2 Definition of Oil and Activities Involving Oil

2.2.3 Determination of "Oil" for Natural Gas and Hazardous Substances

Hazardous Substances and Hazardous Waste (Page 2-5)

API Comment

1) The first sentence of the last paragraph is not consistent with the intent of this section to include hazardous wastes for consistency.

API Recommendation

1) Modify the sentence to address hazardous substances <u>or</u> <u>hazardous wastes</u> for consistency.

Excerpt from Page 2-5

Hazardous substances [ADD THE FOLLOWING UNDERLINED TEXT] or hazardous wastes that are neither oils nor mixed with oils are not subject to SPCC rule requirements.

2.3 "Non-transportation-related" Facilities – EPA/DOT Jurisdiction

2.3.1 Definition of Facility (Page 2-7)

API Comment

1) Because EPA clearly states "facility" as defined in 40 CFR §112.2 applies to Substantial Harm Determination (40 CFR §112.20(f)(1) for Facility Response Plan (FRP) requirements, operators in a single geographical oil or gas field may write SPCC Plans for each tank battery and are not required by regulation to aggregate tank capacities for all tank batteries for FRP purposes. API would like to draw attention to the definition of "facility" provided in the Notice Concerning Certain Issues Pertaining to the July 2002 Spill Prevention Control and Countermeasure (SPCC Rule), FR 69 No. 101 (Page 29730 dated 5-25-04).

API Recommendation

1) Include an excerpt from the settlement language (American Petroleum Institute vs. Michael O. Leavitt and the Environmental Protection Agency, No. 1:02CV02247 PLF Settlement Agreement), to aid the EPA Inspector with their jurisdictional determination during inspections. Also incorporate the settlement agreement into the guidance as an appendix. Excerpt below taken from Settlement Agreement, Attachment D:

Excerpt from Page 2-7

The facility owner or operator, or a Professional Engineer (PE) on behalf of the facility owner/operator, determines what constitutes the "facility." Note that the facility determination for purposes of the SPCC rule should be the same as that used to determine FRP applicability.

[ADD THE FOLLOWING UNDERLINED TEXT]

In the July 2002 SPCC amendments, the Agency promulgated definitions of "facility" and "production facility." These definitions, which appear in 40 CFR §112.2, apply "for the purposes of" Part 112. The Agency has been asked which of these definitions governs the term "facility" as it is used in 40 CFR §112.20(f)(1) when applied to oil production facilities.

40 CFR §112.20(f)(1) sets criteria for determining whether a "facility could, because of its location, reasonably be expected to cause substantial harm to the environment..." (emphasis added). It is the Agency's view that, because, among other things, that section consistently uses the term "facility," not "production facility," it is the definition of "facility" in 40 CFR §112.2 that governs the meaning of "facility" as it is used in 40 CFR §112.20(f)(1), regardless of the specific type of facility at issue."

2.3.2 Determination of Transportation-Related and Non-Transportation-Related Facilities

API Recommendation

 Jurisdiction over loading and unloading of tank trucks and rail cars hauling oil products should remain under the control of DOT. Please delete references to EPA jurisdiction over loading and unloading

activities, specifically in Section 2.3.3 and in Table 2-2. The US Court of Appeals for the District of Columbia is scheduled to hear oral arguments on March 20, 2006 in the case of American Chemistry Council v. DOT to determine jurisdiction over loading and unloading activities of hazardous materials. EPA should not assert jurisdiction pending the final outcome of this litigation.

2.3.3 EPA/DOT Jurisdiction Scenarios

Breakout Tanks (Page 2-11)

API Comment

1) Although not clearly defined in rulemaking, API suggests providing guidance for EPA Inspectors on where the transition from DOT to EPA or EPA to DOT exists within a facility, including non-breakout tanks at DOT facilities.

API Recommendation

Incorporate language from the footnote of the diagrams provided by EPA and DOT to the regulated community (EPA and DOT joint memorandum dated February 4, 2000) in an attempt to provide clarity on jurisdictional boundaries. API suggests revising the last paragraph on Page 2-11 under "Breakout Tanks" as follows:

Excerpt from Pages 2-11 and 2-12

Breakout Tanks

Breakout tanks are usually used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline. They are also sometimes used for bulk storage. A breakout tank may be regulated by EPA, DOT, or both depending on how the tank is used. For example, breakout tanks that are used solely to relieve surges in a pipeline and are not used for any non-transportationrelated activity (i.e., pipeline-in and pipeline-out configuration, with no transfer to other equipment/mode of transportation such as a tank truck), would be subject to DOT jurisdiction. A bulk storage container used to store oil while also serving as a breakout tank for a pipeline or other transportation-related purpose would be subject to both DOT and EPA jurisdiction.⁷ [ADD THE FOLLOWING UNDERLINED TEXT] Determining agency jurisdiction can be difficult and should be treated on a case by case basis. However, general guidance as per the EPA and DOT joint memorandum

dated February 4, 2000, states "When the pipeline operator and the storage or breakout tank operator remain the same, the change in jurisdiction occurs at the first and last pressure influencing device, meter, valve, or isolation flange, at or inside the facility property line. When the pipeline operator and the storage or breakout tank operator are not the same, the change in jurisdiction occurs at the change in operational responsibility or at the first and last pressure influencing device, valve, or isolation flange, at or inside the facility property line. In either of the above situations, the location of the property line should not solely be used to determine jurisdiction when operational activities (loading/offloading) extend beyond the property line." Additional information can be found in the aforementioned memorandum IDELETE THE FOLLOWING STRIKEOUT TEXT] For more information, see the EPA and DOT joint memorandum dated February 4, 2000, which clarifies regulatory jurisdiction over breakout tanks.8

2.4 Reasonable Expectation of Discharge to Navigable Waters in Quantities That May Be Harmful

2.4.4 Definition of "Navigable Waters" (Page 2-15)

API Comment

1) API encourages EPA to include the referenced memorandum as an attachment in an appendix to the guidance document to assist EPA Inspectors with jurisdictional challenges until final outcome of the matter is determined.

API Recommendation

1) Add a reference to the attached Memorandum (Joint Memorandum of U. S. Army Corps of Engineers and EPA, from 68 FR 1995, January 15, 2003) beneath the brief discussion of it on Page 2-15. The Memorandum should be provided in an appendix to the guidance.

2.6 Exemptions to the Requirements of the SPCC Rule

2.6.1 Facilities Subject to Minerals Management Service Regulations (Page 2-18)

API Comment

1) The title to this section should be more accurately stated to reflect

the intent of §112.1(d)(3) in order to avoid confusion with the necessary additional sections recommended to complete the guidance on exemptions to the requirements of the SPCC Rule.

- This Section 2.6 and Subsection 2.6.1 addresses the exemption of facilities subject to Department of Interior (MMS) Regulations noted in the regulation under §112.1(3)(d) but does not address the exemption noted in §112.1(1)(ii) for facilities subject to DOT regulations (now known as DOT/Pipeline and Hazardous Materials Safety Administration (PHMSA)).
- This Section 2.6 and Subsection 2.6.1 addresses the exemption of facilities subject to Department of Interior (MMS) Regulations noted in the regulation under §112.1(3)(d) but does not address the exemption noted in §112.1(1)(iii) for facilities subject to DOI regulations (MMS (for non offshore drilling, production or workover facilities)) or DOT regulations (USCG regulated facilities NOTE: This is an area of the regulation that requires modification now that USCG is part of DHS).

API Recommendation Exempt Facilities

1) Modify the title of Section 2.6.1 as noted below.

2.6.1c <u>Offshore Oil Drilling, Production or Workover</u> Facilities Subject to Minerals Management Service Regulations

2) Add new subsection to Section 2.6 as follows:

2.6.1a Facilities Subject to DOT (PHMSA) Regulations

Section 112.1(1)(ii) excludes any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the MOU between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971.

3) Add new subsection to Section 2.6 as follows:

2.6.1b Facilities Subject to Minerals Management Service and United States Coast Guard (USCG) Regulations

Section 112.1(1)(iii) excludes any equipment, or operation of a vessel or transportation-related onshore or offshore facility which

is subject to the authority and control of the U.S. Department of Transportation, or U.S Department of the Interior, as defined in the MOU between the Secretary of Transportation, the Secretary of Interior, and the Administrator of EPA, dated November 8, 1993.

2.6.2 Underground Storage Tanks (Page 2-19)

API Comment

1) EPA should expand the statement on connected underground piping, underground ancillary equipment, and containment systems being exempted from the SPCC rule.

API Recommendation

 Add after first sentence: Where subject to all technical Federal or State UST requirements, completely buried tanks are not applicable to loading/unloading or secondary containment requirements of the SPCC rule.

Excerpt from Pages 2-19

Under §112.1(d)(4), the SPCC rule exempts completely buried storage tanks, as well as connected underground piping, underground ancillary equipment, and containment systems, when such tanks are subject to all of the technical requirements of 40 CFR part 280 or a state program approved under 40 CFR part 281 (also know as the Underground Storage Tank) regulations). [ADD THE FOLLOWING UNDERLINED TEXT] Where subject to all technical Federal or State UST requirements, completely buried tanks are not applicable to loading/unloading or secondary containment requirements of the SPCC rule. Although these tanks are exempt from the SPCC requirements, they must still be marked on the facility diagram if the facility is otherwise subject to the SPCC rule (§112.7(a)(3)).

2.8 SPCC Applicability for Different Types of Containers

2.8.2 Oil Filled Equipment (Page 2-23)

API Comment

- 1) The second paragraph of this Section is not applicable to the discussion in this Chapter as it pertains to Applicability.
- 2) Additionally, while "EPA believes that it is good engineering practice to have some form of visual inspection or monitoring for this oil-filled equipment to prevent discharges", these inspection

and monitoring programs are not currently required by regulation and the exercise of good engineering practice is up to the discretion of the PE. Once the Proposed Rule is finalized, the visual inspection and monitoring programs will only be required in the event that the oil filled equipment is not capable of being contained and the Plan takes advantage of the general impracticability allowed by the Proposed Rule (elimination of the current requirement for general secondary containment with alternative requirements including inspections or monitoring programs).

API Recommendation

1) Delete the second paragraph.

Excerpt from Page 2-23

[DELETE THE FOLLOWING STRIKEOUT TEXT]

EPA believes it is good engineering practice to have some form of visual inspection or monitoring for this oil-field equipment to prevent discharges as described in §112.1(b). For example, it is a challenge to comply with security requirements under §112.7(g) and countermeasures for discharge discovery under §112.7(a)(3)(iv) without some form of inspection or monitoring program. Additionally, inspection and/or monitoring should be part of an effective contingency plan when a PE determines that secondary containment for this equipment is impracticable.

2.10 Role of the EPA Inspector (Page 2-25)

API Comment

1) The Role of the EPA Inspector is not described consistently throughout the guidance document and in certain instances is unclear and beyond the expected scope of the EPA Inspector. More specifically, Chapter 2, as well as Chapters 3, 5, 6 and 7, address the role of the EPA Inspector once while Chapter 4 addresses it on multiple occasions. API requests that the guidance document remain consistent as noted and the language less prescriptive than the current language of Section 2.10.

API Recommendation

1) API has summarized the Role of the EPA Inspector utilizing language that is in the guidance document – Introduction to Section 1 and Subsection 3.4.2. We recommend that Section 2.10 be replaced, in its entirety, with the following text:

Replacement Language for Section 2.10 on Page 2-25

As stated in the Section 1 Introduction, the regulation is largely performance-based, which allows flexibility in meeting the rule requirements to prevent discharges of oil to navigable waters and adjoining shorelines. In implementing this rule, the owner/operator, Professional Engineer (PE) and the EPA Inspector all have important and unique roles. This section defines these roles as intended by the rule.

The SPCC rule places the responsibility for implementation and compliance on the owner/ operator of the facility. It is the responsibility of the facility owner/operator to determine applicability (§112.1(b)), prepare the SPCC Plan (§112.3 & §112.7), Maintain the plan (§112.3(e)), report certain discharges (§112.4), amend and review the plan (§112.5), have a PE certify the Plan (§112.5(c)), implement the Plan (§112.7), discuss conformance with requirements (§112.7(a)(1)), conduct and document inspections and test as required by the plan (§112.7(e))and train personnel on the plan and its procedures (§112.7(f)). Because of the wide variety of facilities covered by this performance-based rule, the owner/operator is given a great deal of flexibility in selecting the engineering and administrative controls to implement and comply with the rule.

The Plan must be reviewed and certified by a PE to ensure that the plan is prepared in accordance with good engineering practice, considers applicable industry standards, complies with the SPCC requirements and is adequate for the facility. It is often the Professional Engineer that provides the discussion and documentation required to support how the selected controls comply with rule requirements. EPA intends the PE certification to aid both the owner/operator and the EPA Inspector in determining that the Plan as written will comply with the rule requirements if fully implemented and maintained by the owner/ operator.

The fundamental role of the EPA Inspector is to verify the owner/operator's full implementation of the plan as certified by the PE and compliance with the SPCC rules. The EPA Inspector is responsible for gathering information and data to determine compliance with SPCC requirements for those facilities that are regulated by the SPCC rule. During an SPCC inspection, EPA

Inspectors will check that the measures described in the SPCC Plan are implemented at the facility and will fully document all observations and other pertinent information. The Summary of Applicability Flowchart and Applicability Assessment Worksheet, provided as Figures 2-1 and 2-2, are two quick references provided for convenience to aid EPA Inspectors in assessing applicability of the SPCC rule and specific provisions to a particular facility.

Where environmentally equivalent deviations are implemented, the EPA Inspector should note whether applicable SPCC rule provisions have been addressed, whether the alternative measures are in fact environmentally equivalent, and whether the alternative measures appear to agree with recognized industry standards or, where such standards are not used, are in accordance with good engineering practice. However, if controls and procedures are certified by a PE, properly documented in the Plan and are appropriately implemented in the field, they should generally be considered acceptable by EPA regional Inspectors. The EPA Inspector should assess implementation of the Plan, including whether measures appear to have been altered or differ from the descriptions in the Plan, have not been implemented as described in the Plan, require maintenance that has not occurred, appear to be inadequate for the facility, or otherwise do not meet the overall oil spill prevention objective of the SPCC rule.

If the EPA Inspector questions the appropriateness of alternative measures, the EPA Inspector should fully document all observations and other pertinent information for further review by the regional staff. Follow-up action by the EPA Inspector may include requesting additional information from the facility owner or operator on the implementation of the equivalent measure. The EPA Regional Administrator retains the authority to require amendment of a Plan but only after an EPA staff PE has personally reviewed the issue. If the Regional Administrator determines that the measures described in the SPCC Plan do not comply with the rule requirements or are not fully implemented, then the procedures for requiring a Plan amendment under §112.4(d) and (e) and/or an enforcement.

Chapter 3: Environmental Equivalence

3.1 Role of the EPA Inspector (Page 3-1)

API Comment

- 1) The Role of the EPA Inspector is not described consistently throughout the guidance document and in certain instances is unclear and beyond the typical scope of the inspector.
- 2) The PMAA Settlement Letter (Petroleum Marketers Association of America, et al. vs. Michael O. Leavitt and the United States Environmental Protection Agency, No. 1:02CV02249 PLF Settlement Agreement) clearly specifies the PE should establish the frequency for inspecting shop built containers that are 30,000 gallons or less and that are visible from all sides; monthly inspections, as specified in this Section, are not required by the rule.

API Recommendation

- 1) API has provided in the Recommendations to Section 2.10 a summarization of the Role of the EPA Inspector utilizing language from Section 1 Introduction and Subsection 3.4.2. We recommend that the API Recommended Section 2.10 be utilized to either replace or streamline the Role of the EPA Inspector noted in this section.
- At a minimum, replace the stated inspection frequency from "monthly" to "appropriately inspected" as modified below. The reference to the Federal Register at 67 FR 47120 should be changed to reference PMAA Settlement instead, and the Settlement, attached to these comments, should be incorporated into the guidance as an appendix.

Excerpt from Page 3-2

EPA has indicated, however, that for certain shop-built containers – drums and small bulk storage containers, for example - for which internal corrosion poses minimal risk of failure, which are [ADD THE FOLLOWING inspected UNDERLINED TEXT] appropriately IDELETE FOLLOWING STRIKEOUT TEXT] at least monthly, and for which all sides are visible, visual inspection alone may suffice to meet the integrity testing under §112.8(c)(6) or §112.12(c)(6) [DELETE requirements STRIKEOUT TEXT] (67 FR 47120) [ADD **FOLLOWING** FOLLOWING UNDERLINED TEXT] (Petroleum Marketers Association of America, et al. v. Michael O. Leavitt and United States Environmental Protection Agency, Civil Action No. 02-02249 Settlement Agreement). These are only examples: alternative measures that provide equivalent environmental protection may also be appropriate for other site-specific circumstances. See Chapter 7, Inspection, Evaluation, and Testing, for a discussion of "environmentally equivalent" integrity testing.

3.3.1 Security (Page 3-5)

API Comment

1) The security requirements of 112.7(g) specifically exclude oil production facilities. The guidance could be misleading without emphasizing this in the title line.

API Recommendation

1) Add the statement "excluding oil production facilities" to the title of 3.3.1 as follows:

Excerpt from Page 3-5

3.3.1 Security [ADD THE FOLLOWING UNDERLINED TEXT] (excluding oil production facilities)

3.3.2 Facility Drainage (Page 3-9)

API Comment

- 1) The regulatory citation in the first paragraph of Page 3-9 incorrectly cites 112.9(c) and 112.10(c) as being included in the containment requirements of 112.8(b)(3) and 112.(b)(4).
- 2) The last paragraph of Page 3-9 incorrectly states that the oil-water separator is an equivalent environmental protection method under 112.8(b)(3) and 112.8(b)(4). API interprets the rule to include the oil-water separator as a secondary containment option for undiked areas.

API Recommendation

- 1) Strike the reference to §112.9(c) and §112.10(c) in the first paragraph on Page 3-9 to correct the error noted above.
- 2) Replace "equivalent environmental protection" with "containment" in the last paragraph on Page 3-9.

Excerpt from Page 3-9

Undiked Storage Area Provisions

Sections 112.8(b)(3) and 112.8(b)(4) specify performance requirements for systems used to drain undiked areas with the potential for a discharge. These two provisions apply only when the facility chooses to use a facility drainage system to meet general secondary containment requirements under §112.7(c) or a more specific requirement under §112.8(c), [DELETE THE FOLLOWING STRIKEOUT TEXT] §112.9(c), §112.10(c) or §112.12(c). Where the facility drainage cannot be engineered as described in §112.8(b)(3), the SPCC rule requires that the facility equip the final discharge points of all ditches within the facility with a diversion system that would, in the event of a discharge, retain the oil at the facility as described in §112.8(b)(4). Additional requirements in §112.8(b)(5) pertain more specifically to engineering multiple treatment units for these drainage systems.

. . .

Alternatively, a facility owner or operator may engineer the facility drainage system intended to meet general secondary containment requirements of §112.7(c) to flow into an oil/water separator designed to remove oil resulting from facility operations. Chapter 5 of this guidance document describes the requirements, depending on their function, that apply to oil/water separators at SPCC-regulated facilities. The SPCC Plan should discuss how the THE provides [DELETE **FOLLOWING** oil/water separator STRIKEOUT TEXT] environmental equivalence [ADD THE FOLLOWING UNDERLINED TEXT] containment, and any procedures necessary to maintain proper operating conditions and the effectiveness of the system (such as maintenance of the filtration systems). Note that the oil/water separator should be designed to handle the anticipated flow rate and volumes of oil and water. Furthermore, the oil/water separator should be inspected or checked periodically (including after heavy rain events) to ensure that it is working effectively and that it is not holding significant quantities of oil for extended periods of time. For the oil/water separator to provide [DELETE THE FOLLOWING STRIKEOUT equivalent environmental protection [ADD THE TEXT1 UNDERLINED TEXT] containment FOLLOWING under §112.8(b)(3) and (b)(4), the PE must verify that the oil/water separator is adequately designed and operated to effectively retain any discharge as described in §112.1(b).

3.3.5 Piping (Page 3-15)

API Comment

1) API appreciates EPA's position that alternative environmental measures may be appropriate for corrosion protection requirements of 112.8(d). The guidance document gives the EPA Inspector helpful guidance on the available industry standards from which a procedure can be developed by the PE, but it should be emphasized that there may not be an industry standard that is appropriate to be adopted in its entirety. Further, it may be appropriate to incorporate individual components of several standards, and in some cases, develop a program that may not be found in any standards tailored to the site specific conditions.

API Recommendation

1) Add the words "as applicable" to the reference on the review of industry standards at the end of the first paragraph on Page 3-15.

Excerpt from Page 3-15

If alternative measures are used to meet the SPCC corrosion protection requirements, §112.7(a)(2) requires that the Plan state the reasons for nonconformance and explain how the alternative measures provide environmental protection equivalent to coating and cathodically protecting new piping. In order to be considered equivalent environmental protection to cathodic protection, EPA suggests that a comprehensive inspection and preventive maintenance program needs to be implemented to effectively detect and address piping deterioration before it can result in a discharge as described in §112.1(b). The EPA Inspector should verify that the alternative method is described in detail in the Plan, and that the Plan specifies the scope and frequency of tests and inspections and/or refers to the relevant industry standards [ADD THE FOLLOWING UNDERLINED TEXT], as applicable. The EPA inspector should also review records maintained under normal business practice that document the tests and inspections.

3.4.2 Role of the EPA Inspector (Page 3-19)

API Comment

1) The text utilized in this "Role of the EPA Inspector" Section is well developed, considerate of the certification of the PE and generally in line with the role associated with an EPA Inspector. Utilization of this approach throughout the guidance document is recommended. (See comments on Section 2.10)

Table 3-3 SPCC requirements for environmentally equivalent measures (Page 3-25)

API Comment

The date listed under piping section of this table has not been modified to reflect the proposed rule timeline extensions. API considers the requirement to wrap, coat and cathodically protect piping to be a new more stringent requirement. Subject to finalization of the proposed rule, the new date that begins the timeline for installing buried piping and compliance with the cathodic protection, wrapping and/or coating requirement, or an equivalent environmental protection, will be October 31, 2007.

API Recommendation

1) As noted below, modify the date of August 16, 2002 (bottom of Page 3-25) to October 31, 2007.

Excerpt from Page 3-25

Piping	112.8(d)(1)	Does the facility have buried piping installed after [ADD] <u>October</u> 31, 2007 [DELETE] August 16, 2002? If so, is this piping protected against corrosion by wrapping and coating?	Visual Plan review Installation records	
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Chapter 4: Secondary Containment and Impracticability

4.2 Overview of Secondary Containment Provisions

4.2.2 Specific Secondary Containment Requirements (Page 4-11)

API Comment

1) API would like EPA to clarify that tanks permanently manifolded together but isolated from one another by valves or skillet flanges should be considered separate tanks when considering the proper secondary containment sizes of the dikes.

API Recommendation

1) Add a clarifying statement to Section 4.2.2 to exclude containers that are manifolded together and operated with their valves secured in the closed position or otherwise constructed such that each container is individually and independently operated. Suggested language is as follows:

Excerpt from Page 4-11

EPA inspectors should note that the "largest single compartment" may consist of containers that are permanently manifolded together. Permanently manifolded tanks are tanks that are designed, installed, or operated in such a manner that the multiple containers function as a single storage unit (67 FR 47122) [ADD THE FOLLOWING UNDERLINED TEXT] if they are designed with the intention of operating simultaneously to increase available storage capacity. Tanks that are permanently manifolded together but isolated from one another by valves that are secured in the closed position, manifolded together on the top of the tank for overflow protection, or otherwise constructed such that each tank is individually and independently operated, or such that failure of a single tank does not result in release of fluids from any other connected tanks, should be treated as individual tanks rather than aggregate containers for the purpose of determining proper secondary containment.

4.2.3 Role of the Inspector in Evaluating Secondary Containment Methods

API Comment

1) This section does not accurately describe the role of the EPA Inspector. For example, the statement that "the EPA Inspector should evaluate whether the secondary containment system is adequate for the facility..." could be interpreted by an EPA Inspector to mean that he/she should redo the calculations and engineering evaluations certified by the PE. We understand that the real intent is to have the EPA Inspector ensure that the topic has been addressed, and that the plan's provisions are being implemented in the field.

API Recommendation

1) Replace the entire section with the language from Section 2.10. As a minimum replace the first paragraph with the following: "The EPA Inspector should ensure that secondary containment requirements have been addressed in the plan and that the plan's provisions are being implemented in the field. Some items that the EPA Inspector should look for in the field while inspecting for implementation of the plan include:"

4.2.4 Sufficient Freeboard (Page 4-12/13)

API Comment

- 1) As pointed out in API's letter to EPA, dated October 7, 2004, attached to these comments for reference, the use of 110% of the largest tank volume is the well established standard that has been used for accommodating rainfall allowances during the construction and operation of secondary containment systems.
- 2) This standard has been recognized in API RP-D16, API 12R1, and EPA Region 6 Outreach Pamphlet "Information on SPCC Plans" dated July 1992 (Pages 21, 22, and 23).
- The reference to the 25 year 24 hour rainstorm event is inappropriate, absent a notice and comment rulemaking. The regulation does not require utilization of this precipitation criterion and EPA Inspectors should not be misled to inspect against this prescriptive requirement.
- This rainfall allowance has not been required since the inception of the EPA regulation in 1973, and represents a significant change and increase in the cost of compliance without significant added protection to the environment. If EPA intends to add this new requirement, it must first propose it in a notice and comment rulemaking.

API Recommendation

1) Remove the second sentence of the third paragraph of this Section as follows:

Excerpt from Page 4-12

Ultimately EPA determined that, for freeboard, "the proper method of secondary containment is a matter of engineering practice so [EPA does] not prescribe here any particular method" (67 FR 47101). [DELETE THE FOLLOWING STRIKEOUT TEXT] However, where data are available, the facility owner/operator (and [PAGE BREAK] certifying PE) should consider the appropriateness of the 25-year, 24-hour storm event precipitation level as a matter of good engineering practice.

2) The discussion pertaining to 110 percent in the middle of the last paragraph should be removed. In certain cases, 110 percent provides more containment than the 25 year, 24 hour storm event. Additionally, the reference to state requirements is not applicable to this discussion.

Excerpt from Page 4-13

EPA recognizes that a "110 percent of storage tank capacity" rule of thumb may be a potentially acceptable design criterion in many situations, and that aboveground storage tank regulations in many states require that secondary containment be sized to contain at least 110 percent of the volume of the largest tank. [DELETE THE FOLLOWING STRIKEOUT TEXT] However, in some areas, 110 percent of storage tank capacity may not provide enough volume to contain precipitation from storm events. Some states require that facilities consider storm events when designing secondary containment structures, and in certain cases these requirements translate to more stringent sizing criteria than the 110 percent rule of thumb. Other important factors may be considered in determining necessary secondary containment capacity. According to practices recommended by industry groups such as the American Petroleum Institute (API), these factors include:

4.2.5 Role of the EPA Inspector in Evaluating Sufficient Freeboard (Page 4-16)

API Comment

1) The Role of the EPA Inspector is not consistent throughout the guidance document and in certain instances is unclear and beyond the typical scope of the EPA Inspector.

API Recommendation

- 1) API has provided in the Recommendations to Section 2.10 a summarization of the Role of the EPA Inspector utilizing language from Section 1 Introduction and Subsection 3.4.2. API believes the field is not the appropriate setting to review these elements. We recommend that the API Recommended Section 2.10 be utilized to either replace or streamline the Role of the EPA Inspector noted in this section.
- 2) At a minimum, the following modifications should be made to this Section:

Excerpt from Page 4-16

To determine whether secondary containment is [ADD THE FOLLOWING UNDERLINED TEXT] <u>addressed and implemented</u> [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>sufficient</u>, the EPA inspector may:

- Verify that the Plan specifies the capacity of secondary containment
 [ADD THE FOLLOWING UNDERLINED TEXT] capacity of
 secondary containment specified in the Plan is adequate for each
 of the containers, including an allowance for sufficient freeboard.
 [DELETE THE FOLLOWING STRIKEOUT TEXT] along with
 supporting documentation, such as calculations for comparing
 freeboard capacity to the volume of precipitation in an expected
 storm event.
 - If calculations are not included with the Plan, and the inspector suspects the secondary containment is inadequate, the inspector may request [ADD THE FOLLOWING UNDERLINED TEXT] that the owner/operator obtain, in writing from a PE, a confirmation that the secondary containment systems have been evaluated and comply with the rule [DELETE THE FOLLOWING STRIKEOUT TEXT] supporting documentation from the owner/operator.¹

[DELETE THE FOLLOWING STRIKEOUT TEXT]

- If diked area calculations appear inadequate, review local precipitation data such as data from airports or the National Weather Service,² as needed.
- Review operating procedures, storage tank design, and/or system controls for preventing inadvertent overfilling of oil storage tanks that could affect the available capacity of the secondary containment structure.
- Confirm that the secondary containment capacity can reasonably handle the contents of the largest tank on an engoing basis (i.e., including during rain events).
- During the inspection, verify that the containment structures and equipment are maintained and that the SPCC Plan is properly implemented.

4.2.8 "Sufficiently Impervious" (Page 4-22/23)

API Comment

- 1) API recognizes and agrees with the last sentence of the first paragraph "Ultimately, the determination of the imperviousness should be verified by the certifying PE". This sentence should be repeated at the end of this Section.
- 2) The fourth paragraph language provides detail outside the scope of this regulation and the role of the EPA Inspector. The emphasis noted above regarding the ultimate determination made by the PE addresses the issue.
- 3) The emphasis should remain on the PE as the most qualified person to attest to the facility's containment system being constructed per §112.7(c) such that any discharge from primary containment will not escape the containment system before cleanup occurs.

API Recommendation

1) Delete, in its entirety, the following paragraph from Section 4.2.8.

Excerpt from Page 4-22 and 4-23

[DELETE THE FOLLOWING STRIKEOUT TEXT]In certain geographic locations the native soil (e.g., clay) may be determined as sufficiently impervious by the PE. However, there are many more instances where good engineering practice would generally not allow the use of a facility's native soil alone as secondary containment because [PAGE BREAK] the soil is not homogeneous. In fact, certain state requirements may restrict the use of soil as a means of secondary containment, and many state regulations

explicitly forbid the discharge of oil on soil. Pennsylvania's Storage Tank and Spill Prevention Act, for example, requires that facilities take immediate steps to prevent injury from any discharge of a substance that has the potential to flow, be washed or fall into waters, and endanger downstream users. The Act requires that residual substances be removed, within 15 days, from the ground or affected waters. Discharges to soil and groundwater may also violate other federal regulations. In addition, the EPA inspector should strengly urge facility owners and operators to investigate and comply with all state and local requirements. An inspector who notices potential violations under other statutes or regulations should contact the appropriate authorities for follow-up-with the facility.

2) Modify the last paragraph of this section to more accurately reflect the language used in 40 CFR 112.7(c) and provide consistency with the PE support provided in the opening paragraph of this Section

Excerpt from Page 4-23

In summary, any of the owner/operator's determinations specifying whether secondary containment structures are capable of [ADD THE FOLLOWING UNDERLINED TEXT] <u>preventing oil from escaping the containment system and entering navigable water before cleanup occurs</u> [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>containing oil until it is cleaned up ("sufficiently impervious")</u> should be made based on good engineering practice and may consider site-specific factors.

4.2.9 Role of the EPA Inspector in Evaluating "Sufficiently Impervious" (Page 4-23)

API Comment

- 1) The Role of the EPA Inspector is not consistent throughout the guidance document and in certain instances is unclear and beyond the typical scope of the EPA Inspector. The language of this section differs from the other sections of the guidance document with respect to the discretionary judgment given to the EPA Inspector to over-ride technical decisions made by the PE.
- 2) The section provides very prescriptive methods for the EPA Inspector when reviewing facilities' secondary containment for their impervious nature. API would like to emphasize that the highly technical, multi-disciplinary skills utilized to study the soil and groundwater should be reserved for only those who have the

- proper technical expertise. The language, as it is currently written, appears to go far beyond what the rule requires and may be considered rulemaking.
- As was detailed in the API comments for Section 2.10 Role of the EPA Inspector, delineation of the role of the EPA Inspector should be provided with continuous emphasis on the implementation and compliance responsibility of the owner/operator and the certification of the Plan by the PE. Continued reference to the API text provided in this guidance document for Section 2.10 is suggested in order to maintain consistency.

API Recommendation

- API has provided in the Recommended revisions to Section 2.10 a summarization of the Role of the EPA Inspector utilizing language from Section 1 Introduction and Subsection 3.4.2. We recommend that the API Recommended Section 2.10 be utilized to either replace or streamline the Role of the EPA Inspector noted in this section.
- At a minimum, re-write the language of Section 4.2.9 to better define the role EPA Inspector as compared to that of the PE's role in attesting to the facility's ability to prevent oil from reaching navigable water until cleanup occurs. Utilizing language from Section 3.4.2 and the Introduction Section in Chapter 1, suggested replacement language for this Section 4.2.9 is provided as follows:

Excerpt from Page 4-23

[DELETE ALL OF SECTION 4.2.9 AND REPLACE WITH THE FOLLOWING TEXT] Like other technical aspects of the SPCC Plan, the determination that a facility's soil is sufficiently impervious must be made on a case-by-case basis by the PE. The plan should describe the basis for such a determination. The inspector should consider these factors when reviewing the facility to see if the situation in the field implements the plan. Although not required by the rule, the plan may include supporting documentation that was used by the PE when making this determination in developing the plan. It should be assumed that the engineer, using sound engineering judgment, is the most qualified person to make the determination of "sufficiently impervious".

By certifying an SPCC Plan, a PE attests that the Plan has been prepared in accordance with good engineering practice, that it meets the requirements of 40 CFR part 112, and that it is adequate for the facility. EPA believes that, in general, PEs will carefully examine each facility and their attestation for sufficiently impervious, when accompanied by appropriate documentation, should be considered acceptable by EPA inspectors. If the EPA Inspector questions the PE's statement of "sufficiently impervious" he/she should fully document all observations and other pertinent information for further review by the regional staff. Follow-up action by the EPA Inspector may include requesting additional information from the facility owner or operator. The EPA Regional Administrator retains the authority to verify the data.

4.2.10 Facility Drainage (Onshore Facilities) (Page 4-26)

API Comment

1) The wording of the first paragraph on Page 4-26 is unclear.

API Recommendation

1) Reword the first paragraph on Page 4-26 as follows:

Excerpt from Page 4-26

A facility does not have to address the undiked area requirements of §112.8(b)(3) and (4) or §112.12(b)(3) and (4) [ADD THE FOLLOWING UNDERLINED TEXT] (which typically addresses passive containment measures) if active containment measures (as described on Page 4-17) are utilized as secondary containment [DELETE THE FOLLOWING STRIKEOUT TEXT] facility does not use drainage systems to meet one of the secondary containment requirements in the SPCC rule].

4.2.11 Role of the EPA Inspector in Evaluating Onshore Facility Drainage (Page 4-27)

API Comment

1) It is the PE's job, not that of the EPA inspector, to determine if the drainage for a facility is appropriate. It is the role of the EPA Inspector to ensure that the PE's determination is documented in the Plan and meets the requirements of the Rule.

API Recommendation

1) Modify the second sentence of this paragraph as follows:

Excerpt from Page 4-27

The inspector should also examine the facility to determine whether the drainage procedures are implemented as described in the SPCC Plan [DELETE THE FOLLOWING STRIKEOUT TEXT] and whether they are appropriate for the facility.

4.4 Selected Issues Related to Secondary Containment and Impracticability Determinations

4.4.1 General Secondary Containment Requirements (Page 4-29)

API Comment

1) API acknowledges that calculating probable discharge amounts for undiked piping located throughout each facility is a good method of assessing consequences of an unexpected release. However, certain facilities have an extensive amount of undiked piping for which a significant amount of effort would be required to calculate expected discharges for each section of piping. It is for this reason that API requests that the language be revised to reflect EPA's understanding that this practice is not required but it is a good engineering practice to consider when developing SPCC plans.

API Recommendation

1) Revise the second paragraph under "Piping and Flowlines" as follows:

Excerpt from Page 4-29

Section 112.7(c) provides flexibility in the method of secondary containment: active measures including land-based response capability, sorbent materials, drainage systems, and other equipment are acceptable. Section 112.7(c) does not prescribe a specific containment size for piping and flowlines; however, good engineering practice prescribes that containment size should be based on the magnitude of a reasonable discharge scenario, taking into consideration the facility and operation. [ADD THE FOLLOWING UNDERLINED TEXT]Such planning standards are common under the contingency planning of OPA 90 and it may be appropriate to use the 50 bbl discharge planning amount prescribed in the small discharge scenario of the EPA's model plan (40 CFR 112.20 App. F). A determination of adequate secondary containment should consider the reasonably expected sources, maximum flow rate, duration of a discharge. and detection capability. [ADD THE FOLLOWING UNDERLINED TEXT] EPA acknowledges that calculations may not be practical at large facilities due to the large number and complexity of the

piping and more general assumptions may be appropriate. The EPA inspector should ensure that the secondary containment method for piping and flowlines is documented in the SPCC Plan and that the PE has certified that the method is appropriate for the facility according to good engineering practice. If active methods of containment are selected, the facility personnel should be able to demonstrate that they can effectively deploy these measures to contain a potential spill before it reaches navigable waters or adjoining shorelines.

Chapter 5: Oil/Water Separators

5.6 Documentation Requirements and the Role of the EPA Inspector

5.6.1 Documentation by Owner/Operator (Page 5-15)

API Comment

1) The guidance document discussion on the documentation required by the owner/operator with regard to oil/water separators used for secondary containment extends beyond any part of the documentation required by the SPCC rule.

API Recommendation

1) Revise the language in Section 5.6.1 to decrease the documentation burden that facilities have to include in their plan. Suggested language is as follows:

Excerpt from Page 5-15

5.6.1 Documentation by Owner/Operator

Oil/water separators used exclusively for wastewater treatment are exempt from all SPCC requirements, and no documentation is required for this equipment in the SPCC Plan.

For oil/water separators used to meet SPCC secondary containment requirements, the SPCC Plan should discuss the separator [ADD THE FOLLOWING UNDERLINED TEXT] <u>capacity</u>, <u>configuration and overall operation to ensure that it functions in a manner that is consistent with its intended use</u>. [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>design capacity</u>, <u>configuration</u>, <u>maintenance</u>, <u>operation and other elements of the drainage systems that ensure proper functioning and containment of the oil as required by §112.7(a)(3)(iii)</u>. <u>Examples of elements that this discussion should include are:</u>

- The presence and configuration of valves to prevent the accidental release of oil;
- Routine visual inspection of the oil/water separator, its contents, and discharges of offluent;
- Preventive maintenance of facility equipment affecting discharge, including the removal of settled pollutants and collected oil;

- A drainage area that flows to the oil/water separator and corresponding anticipated flow rate of the drainage system to the separator;
- Appropriate capacity of the oil/water separator for oil and for wastewater:
- Provisions for adequate separate storage capacity (based on the containment sizing required by the rule) to contain oil recovered in the oil/water separator; and
- Documentation associated with the maintenance and inspection of oil/water separators.

5.6.2 Role of the EPA Inspector (Page 5-16)

API Comment

1) API acknowledges that the capacity and operating capabilities of the oil/water separator should be fully understood by the PE and it is in the PE's best interest to make decisions on the adequacy of the separator based on his/her professional judgment and their understanding of the equipment. The prescriptive language of the section specifies a level of technical detail not required by the rule. The section should be re-written to emphasize the inspector's role simply to verify the PE's determination, properly documented in the plan, that the equipment provides the adequate containment, or meets the exemption granted for waste water treatment systems.

API Recommendation

1) Revise Section 5.6.2 to minimize the discretion of the EPA Inspector to make the determination of the proper categorization of the oil/water separator and to emphasize the importance of the PE in properly categorizing the use of the separator as either for the treatment of wastewater, or as a means of secondary containment.

Excerpt from Page 5-16

5.6.2 Role of the EPA Inspector

As with other aspects of the SPCC Plan, the certifying PE will review the use of and applicable requirements for oil/water separators at a facility and ensure that they are consistent with good engineering practice.

The EPA inspector will [ADD THE FOLLOWING UNDERLINED TEXT] review the plan and the use of the oil/water

separator to ensure that the proper considerations are addressed for either categorizing the separator as a waste water treatment unit or for the purpose of providing secondary containment. If the Plan is certified by a PE and the distinction of the use of the separator is consistent with the requirements of the rule, it will most likely be considered acceptable by the Regional Administrator. [DELETE THE FOLLOWING STRIKEOUT TEXT] verify that any oil/water separators at a facility that are not addressed in the SPCC Plan are in fact used exclusively for wastewater treatment and not to meet any requirement of part 112. This review considers the intended and actual use of the separator. The EPA inspector should consider the intended use of the separator at the facility (e.g., wastewater treatment, secondary containment, oil production, recovery, or recycling), any flow diagrams illustrating the use of the separator, and the design specifications of the unit in evaluating the proper application of the wastewater exemption. The EPA inspector may also consider the flowthrough capacity of the separator, the emulsion of oil present within the separator, and the design specifications of the unit in evaluating the use of the oil/water separator.

For oil/water separators used to meet SPCC secondary containment requirements, the EPA inspector will verify that the Plan includes, for each oil/water separator used as secondary containment, a discussion of the separator design capacity, configuration, maintenance, and operation, as well as other elements of the drainage systems that ensure proper functioning and containment of the oil in accordance with §112.7(a)(3)(iii). Inspectors should note the risk associated with this form of containment and should evaluate the design, maintenance, operation, and efficacy of oil/water separator systems used for containment very carefully. Generally, these separators should be monitored on a routine schedule, and collected oil should be removed as appropriate and in accordance with the drainage procedures in the Plan.

. . .

By certifying the SPCC Plan, a PE attests that the Plan has been prepared in accordance with good engineering practice and with the requirements of 40 CFR part 112, and that the Plan is adequate for the facility. Thus, if the wastewater treatment exemption is certified by the PE or if other oil/water separator uses are properly documented, they most likely will be considered acceptable by EPA inspectors. However, if the documented uses of the oil/water separators do not meet [ADD THE FOLLOWING

UNDERLINED TEXT] <u>prevent spills from reaching navigable</u> <u>waters,</u> [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>the standards of common sense,</u> or appear to be incorrect, or deviate from the use described in the Plan, or are not maintained or operated in accordance with the Plan, [ADD THE FOLLOWING UNDERLINED TEXT] <u>or the separator appears to be malfunctioning or out of service,</u> [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>simply do not operate correctly,</u> further follow-up action may be warranted. This may include a request for more information or a Plan amendment in accordance with §112.4(d).

Chapter 6: Facility Diagrams

6.1 Introduction and 6.1.1 Purpose (Page 6-1)

API Comment

- 1) The requirement for inclusion of fixed containers on the facility diagram should be consistent with the preamble language of the 2002 rule (Page 47097). API recommends the use of the preamble language in this section to make clear to all EPA Inspectors that only fixed containers are to be included on the diagram. Using the preamble language will minimize the potential for EPA Inspectors to mistakenly request mobile containers (i.e. drums) be included on the diagram.
- 2) Emphasis that the approach taken for preparing an adequate facility diagram is primarily at the discretion of the PE is important to make at the outset of this Section. Section 6.2.1 adequately addresses this point; however the emphasis should also be made here.

API Recommendation

- 1) Revise Section 6.1 to include, by footnote, a reference to the preamble of the 2002 rule which makes clear EPA's intent to include only fixed containers.
- 2) Add the "fixed" to all references to "container" throughout the entire Section 6. For the sake of brevity, only Section 6.1 and 6.1.1 are reference below; however, all applicable references to containers should be modified to accurately reflect the reference to fixed containers. Sections not attached below should be revised in a manner similar to that listed below.
- 3) The sentence at the end of Section 6.2.1 clarifying the PE's discretion should be added to the end of the Introduction.

Excerpt from Page 6-1

6.1 Introduction

Section 112.7(a)(3) of the SPCC rule requires that facility owners and operators include in the SPCC Plan a diagram of the facility that identifies the location and contents of [ADD THE FOLLOWING UNDERLINED TEXT] <u>fixed</u> oil containers, connecting piping, and transfer stations. The diagram helps to ensure safe and efficient response actions, effective spill prevention and emergency planning, ease of Plan review by an EPA inspector, and proper implementation of the Plan by facility personnel. This chapter explains the requirement for a facility diagram, provides guidelines on the necessary level of detail, and includes several facility diagrams as examples.

[ADD THE FOLLOWING UNDERLINED TEXT AS AN ADDITIONAL PARAGRAPH] <u>The level of detail provided and the approach taken for preparing an adequate facility diagram is primarily at the discretion of the PE.</u>

6.1.1 Purpose

The facility diagram is an important component of an SPCC Plan because the diagram is used for prevention, planning, inspection, management, and response considerations. EPA and facility inspectors, responders, and facility personnel need to be aware of the location of all [ADD THE FOLLOWING UNDERLINED TEXT] fixed¹ containers, piping, and transfer areas subject to the SPCC rule. The facility diagram may also assist response efforts by helping responders determine the flow pathway of discharged oil and take more effective measures to control the flow of oil. This may avert damage to sensitive environmental areas; may protect drinking water sources; and may help prevent discharges to other conduits, to a treatment facility, or to navigable waters or adjoining shorelines. The diagram may also serve to address the rule requirements by describing, pictorially, the capacity and type of oil in each container, the associated discharge/drainage controls, and the flow path of a discharge (§112.7(a)(3)(i) and (iii) and 112.7(b), respectively). Additionally, the diagram may be attached to a facility inspection checklist to identify areas, [ADD THE FOLLOWING UNDERLINED TEXT] fixed containers, or equipment subject to inspection. Diagrams may also help federal, state, or facility personnel avoid certain hazards and identify the location of facility response equipment. Finally, by informing responders of the location and content of containers, a facility diagram helps to ensure their safety in conducting response actions and to protect property.

[ADD THE FOLLOWING UNDERLINED FOOTNOTE] <u>Note¹</u>: <u>See the preamble to the July 17, 2002 Rule for EPA's discussion on diagram requirements: "The Facility diagram must include all fixed (i.e., not mobile or portable) containers which store 55 gallons or more of oil and must include information marking the contents of those containers." [67 FR 47097]</u>

6.2 Preparing a Facility Diagram (Page 6-2)

API Comment

- 1) As explained in API's comments in Section 6.1, the requirement to include mobile and portable containers on the diagram (including content and capacity) expands the diagram contents specified in the preamble to the July 17, 2002 Rule and the requirements that EPA originally intended.
- 2) The "Recommended" bullets provided on Page 6-2 are misleading and not practical for EPA Inspectors nor are they enforceable. Guidance should be limited to enforceable requirements only.

API Recommendation

- Change the second bullet listed in Section 6.2 to reflect the original intent of EPA based on the preamble language. The revised language should be modified as provided below.
- 2) The "Recommended" bullets should be pulled out to a "Helpful Hints" appendix for use by owners and operators. It should be made very clear that these check list items are not required by the rule.

Excerpt from Page 6-2

6.2 Preparing a Facility Diagram

Facility diagrams provided as part of an SPCC Plan often illustrate the following Information required by §112.7(a)(3):1

- Aboveground and underground storage tanks (including content and capacity
- [ADD THE FOLLOWING UNDERLINED TEXT] <u>Permanent storage</u> <u>areas or staging areas of mobile portable containers (including content and capacity);</u>
- Hydraulic operating systems or manufacturing equipment;
- Oil-filled electrical transformers, circuit breakers, or other equipment (including content and capacity);
- Any other oil-filled equipment (including content and capacity);
- Oil pits or ponds (at production facilities);
- Oil/water separators (e.g., at tank batteries, separation, and treating facility installations associated with production facilities);
- Fill ports and connecting piping (scale of drawing permitting);
- Oil transfer areas; and
- Loading racks/unloading areas.

[DELETE THE FOLLOWING STRIKEOUT TEXT AND MOVE TO A NEW "HELPFUL HINTS" APPENDIX FOR OWNERS AND OPERATORS]

Recommended:

- Secondary containment structures, including oil/water separators used for containment:
- Storm drain inlets and surface waters that could be affected by a discharge;
- Direction of flow in the event of a discharge (which can serve to address the SPCC requirement under §112.7(b));
- Legend that indicates scale and identifies symbols used in the diagram;

- Location of response kits and firefighting equipment;
- Location of valves or drainage system control that could be used in the event of a discharge to contain oil on the site;
- Compass direction; and
- Topographical information and area maps.

6.2 Preparing a Facility Diagram (Page 6-3)

API Comment

API understands EPA's interest in bringing attention to hazardous substances that are stored on site. However, the SPCC rule is not intended to regulate these substances and the language that suggests the inclusion of these containers extends beyond the requirements of the rule. As EPA notes, this is not required and therefore not enforceable and should be deleted.

API Recommendation

1) Remove in its entirety, the first paragraph on Page 6-3 that refers to the identification of hazardous materials containers on the facility diagram.

Excerpt from Page 6-3

[DELETE THE FOLLOWING STRIKEOUT TEXT]

In addition, for purposes of emergency response, EPA recommends, but does not require, that an owner/operator mark on a facility diagram containers that store Clean Water Act (CWA) hazardous substances (listed in 40 CFR part 116, Designation of Hazardous Substances) and label the contents of these containers (67 FR 47097).

6.2.2 Facility Description and 6.2.3 Oil Containers (Page 6-3)

API Comment

1) Sections 6.2.2 and 6.2.3 should be modified to clarify that only fixed oil storage containers and mobile or portable container storage areas need to be included on the diagram.

API Recommendations

1) Revise Sections 6.2.2 and 6.2.3 to include the "fixed" container clarification and the addition of locations of mobile and portable container storage areas as follows:

Excerpt from Page 6-3

6.2.2. Facility Description

Section 112.7(a)(3) requires that the Plan include a description of the physical layout of the facility. In addition to marking the location and contents of each [ADD THE FOLLOWING UNDERLINED TEXT] fixed oil storage container and mobile and portable container storage areas [DELETE THE FOLLOWING STRIKEOUT TEXT] oil storage container at the facility, this description may include information on the facility location, type, size, and proximity to navigable waters, as well as other relevant information. This general facility description is often supplemented with a more specific description of containers subject to the SPCC rule to complement what is required on the facility diagram (e.g., storage capacity and content).

6.2.3 Oil Containers

The facility diagram must include all [ADD THE FOLLOWING UNDERLINED TEXT] <u>fixed</u> containers (including oil-filled equipment) that store 55 gallons or more of oil and must include information indicating the contents of these containers (§112.7(a)(3)). [ADD THE FOLLOWING UNDERLINED TEXT] <u>Locations of mobile and portable container storage locations should also be included as discussed in Section 6.2.4.</u> The 2002 revisions to the SPCC rule established a minimum container size of 55 gallons. Pursuant to §112.1(d)(5), the rule does not apply to containers of less than 55 gallons, and therefore they do not need to be included on the facility diagram.

6.2.4 Mobile or Portable Containers (Page 6-4)

API Comment

The current language in Sections 6.2.4 is inconsistent with our understanding of the outcome of ongoing discussions with your staff. API strongly disagrees with the requirements that extend far beyond what the rule requires, such as the requirement to log all drum activity, and requests that the section be re-written to be more aligned with the rule as it is currently written.

API Recommendation

1) Re-write Section 6.2.4 to remove references to additional requirements that are not supported by the rule. Suggested language is as follows:

Excerpt from Page 6-4

6.2.4 Mobile or Portable Containers

The owner/operator must state the contents and location of [ADD THE FOLLOWING UNDERLINED TEXT] fixed container on the diagram of the facility (§112.7(a)(3)). For portable containers (e.g., drums and totes), the facility owner/operator may note [ADD THE FOLLOWING UNDERLINED TEXT] the location of the permanent storage or staging areas and the general contents of containers that are stored. Capacities of each mobile or portable container do not have to be included on the diagram but an approximate capacity of the largest one and the approximate aggregate capacity of all mobile or portable storage containers that are typically stored in the areas should be included on the spill potential list. [DELETE THE FOLLOWING STRIKEOUT TEXT] the general contents of each container and provide more detailed content information on a separate sheet or log, as well as other information, such as container capacity, that the PE determines to be appropriate to adequately describe the facility. If the contents of a container change-frequently, the contents may be recorded on a separate sheet or log, or on the diagram (67 FR 47097). In this case, the diagram should note that contents vary. Additionally, the PE may choose to identify an area on the facility diagram (e.g., a drum storage area) and include a separate log that can be updated by facility personnel. The PE should develop a reasonable estimate of the number of containers in the area and the capacity of the containers, and consider routine movement of the containers for the Plan. This estimate can be used to determine applicability of the rule thresholds and provide a general description of the [DELETE mobile/portable containers in the Plan. FOLLOWING STRIKEOUT TEXT] The PE should also include a procedure for maintaining the log, in order to avoid PE certification of technical amendments of the Plan as the number of mobile/portable containers changes at the facility.

Mobile containers should be marked on the facility diagram in their out-of-service or designated storage area or where they are most frequently located, such as a warehouse drum storage area. The facility owner/operator and certifying PE determine how best to

represent mobile/portable containers on the facility diagram, such as by developing a log or indicating primary storage areas. If mobile containers are moved throughout the facility and do not immediately return to a specified location easily identified on the facility diagram, the exact location could be addressed on a separate sheet or log. This log would complement the facility diagram and the SPCC Plan by providing further information on the specific location and contents of mobile and portable containers. In addition, the diagram must identify the final location of mobile or portable containers (as required in §112.7(a)(3)) that return to a specific designated area to comply with the specific secondary containment requirements in §112.8(c)(11). (See Chapter 4 of this document—for—a discussion—of—secondary—containment requirements.)

6.2.6 Piping and Manufacturing Equipment (Page 6-5)

API Comment

1) API agrees with EPA that some plans may require a flexible approach to satisfy the requirement and provide a product that serves that serves the best interests of the facility. blueprints, engineering diagrams, and other technical information are not always retained on-site so it may not be available for review. In addition, the extent and level of detail will vary according to the type of facility involved. Oftentimes, the repository for such highly detailed drawings may be a regional office or even corporate headquarters. Furthermore, detailed drawings can be of extreme sensitive nature with some facilities potentially being covered under the Critical Infrastructure Protection Program. API believes the owner/operator and the PE should collectively decide what information to include on the drawings and include references to more detailed drawings only if they would be considered an added value to the plan.

API Recommendation

1) The following paragraphs should be revised to reduce the degree of burden that the owner/operator has to produce SPCC diagram supplements to an EPA Inspector during the inspection should they request them. The suggested modifications are as follows:

Excerpt from Page 6-5

6.2.6 Piping and Manufacturing Equipment

The facility diagram must also include all transfer stations (i.e., any location where oil is transferred) and connecting pipes (§112.7(a)(3)). Associated piping and manufacturing equipment present at an SPCC-regulated facility may be difficult to represent on a facility diagram, due to their relative location, complexity, or design. Recognizing this, EPA allows flexibility in the way the facility diagram is drawn. An owner/operator may represent such systems in a less detailed manner on the facility diagram in the SPCC Plan as long as more detailed diagrams of the systems are maintained [DELETE THE FOLLOWING STRIKEOUT TEXT] at the facility and referenced [ADD THE FOLLOWING UNDERLINED TEXT] in the plan. [DELETE THE FOLLOWING STRIKEOUT TEXT] on the diagram. Examples of more detailed diagrams may include blueprints, engineering diagrams, or diagrams [ADD THE FOLLOWING UNDERLINED TEXT] available at the facility or at a regional or corporate office [DELETE THE FOLLOWING STRIKEOUT TEXT] developed to comply with other local, state, or federal requirements.

[DELETE THE FOLLOWING STRIKEOUT TEXT] The scale and level of detail of the facility diagram may make it difficult to show small transfer lines within containment structures. Schematic representations that provide a general overview of the piping service (e.g., supply/return) may provide sufficient information when combined with a description of the piping in the Plan. [DELETE THE FOLLOWING STRIKEOUT TEXT] Alternatively, overlay diagrams showing different portions of the piping system may be used where the density and/or complexity of the piping system would make a single diagram difficult to read.

Examples of ways that manufacturing equipment may be represented include a box that identifies the equipment and its location, or a simplified process flow diagram. Figure 6-1, which is an excerpt of a complete facility diagram (Figure 6-4) included later in Section 6.4, provides an example showing how manufacturing equipment may be represented in a facility diagram. [DELETE THE FOLLOWING STRIKEOUT TEXT] For areas of complicated piping, which often include different types, numbers, and lengths of pipes, the facility diagram may show a simplified box labeled "piping" or show a single line that identifies the service (e.g., supply/return), as long as more detailed diagrams are available at the facility. Figure 6-2 provides an example showing how a complex piping area may

be represented in a facility diagram, and is also an excerpt of the example facility diagram presented in Figure 6-4. [ADD THE FOLLOWING UNDERLINED TEXT] The owner/operator and the PE should collectively decide what information to include on the drawings and include references to more detailed drawings only if they would be considered an added value to the Plan.

6.2.7 Use of State and Federal Diagrams (Page 6-7)

API Comment

 Due to the extensive detail required for Facility Response Plan (FRP) diagrams per 40 CFR 112.20, API suggests that the guidance document discuss an option to include the FRP diagram to satisfy the SPCC requirement if an FRP has been prepared for the facility.

API Recommendation

1) Add a statement that supports the use of the FRP diagram to satisfy the SPCC requirement in instances where an FRP has been developed. API's recommended language is as follows:

Excerpt from Page 6-7

6.2.7 Use of State and Federal Diagrams

Some state and federal regulations may require a diagram with similar or overlapping requirements, whereas others do not. SPCC is a federal program that specifies minimum requirements, which states may supplement with more stringent requirements. A facility diagram prepared for a state or federal plan or for other purposes (construction permits, facility modifications, or other pollution prevention requirements) may be used in an SPCC Plan if it meets the requirements of the SPCC rule. [ADD THE FOLLOWING UNDERLINED TEXT] In instances where a Facility Response Plan (FRP; developed under 40 CFR 112.20) has been developed and approved for the facility, the diagram can be used for the purpose of the SPCC Plan.

6.3 Facility Diagrams Examples

6.3.1 Figure 6-3, Table B-2 Example Facility Diagram (Page 6-8/10)

API Comment

1) As stated in Section 6.2.4, API strongly disagrees with including materials information that extends far beyond what the rule requires. The section should be re-written to be consistent with the rule requirements. Maintaining a daily drum log for mobile and portable containers is not required and it has the potential to create an undue burden for large facilities that routinely handle large amounts of drums, totes, and/or mobile/portable containers. All references to a drum log in the example diagram provided in the test and in Section 6.3.1 should be removed.

API Recommendation

1) API strongly encourages EPA to remove the drum storage warehouse log (Table B-2).

Excerpt from Page 6-8

provides a reference to a supplementary table that contains the volume and content of the storage tanks shown on the diagram (appended to the diagram as Table B-1). At the discretion of the PE who reviewed and certified the Plan, the example facility diagram also depicts secondary containment methods and includes a reference to calculations of containment capacity provided in other parts of the SPCC Plan. [DELETE THE FOLLOWING STRIKEOUT TEXT] Also, a separate log (Table B-2) identifies the contents of the drums in the storage warehouse. Please refer to Section 6.2.3 of this document for more information.

Excerpt from Page 6-10

[DELETE THE FOLLOWING STRIKEOUT TEXT]

Table B-2. Drum-storage warehouse log.

Number and Type of Container	Contents	Capacity	Location at facility
15 drums	lubrication oil	55 x 15 = 825	Drum storage warehouse
5 drums	engine oil	55 x 5 = 275	Drum storage warehouse
10 drums	usod oil	55 x 10 = 550	Drum storage warehouse
	of Container 15 drums 5 drums	15 drums lubrication oil 5 drums engine oil	of Container 15 drums lubrication oil 55 x 15 = 825 5 drums ongino oil 55 x 5 = 275

6.4 Review of Facility Diagram

6.4.1 Documentation by Owner/Operator (Page 6-16)

API Comment

1) As suggested in API's comments in Section 6.2.6, API would like to reiterate that detailed blueprints, engineering drawings, etc. are not always located at the facility and the language of Section 6.4.1 suggests that the facility is responsible for maintaining them. API would like to revise the wording that lists the conditions in which EPA may require follow up action.

API Recommendation

1) Remove the language in the second to the last sentence of Section 6.4.1 to lessen the burden of keeping extensive engineering drawings, blueprints, etc. on site when it may not be in the best interest of the company. API's recommended modification is as follows:

Excerpt from Page 6-16

6.4.1 Documentation by Owner/Operator

By certifying a SPCC Plan, a PE attests their familiarity with the requirements of 40 CFR part 112, that the Plan has been prepared in accordance with good engineering practice following the requirements of 40 CFR part 112, that the Plan is adequate for the facility, and that he or his agent visited the facility. Thus, if an SPCC Plan is certified by a PE and the facility diagram is consistent with the rule requirements, it will [DELETE THE FOLLOWING STRIKEOUT TEXT] *most likely* be considered acceptable by regional inspectors. However, if the diagram does not meet the rule requirements, the standards of common sense, the facility design has changed, the supporting drawings for a simplified diagram are not available at the facility [ADD THE FOLLOWING UNDERLINED TEXT] *or at a regional or corporate office*, or the diagram appears to be inadequate for the facility, appropriate follow-up action may be warranted. This may include a request for more information or a Plan amendment in accordance with §112.4(d).

6.4.2 Role of the EPA Inspector (Page 6-16)

API Comment

- 1) The Role of the EPA Inspector is not consistent throughout the guidance document and in certain instances is unclear and beyond the typical scope of the EPA Inspector.
- 2) As stated in Section 6.1, the 2002 SPCC rule preamble language is very clear that it is EPA's intent on only requiring fixed containers to be included on the facility diagram. API requests that EPA make this clear to EPA Inspectors by clearly stating this in the list of items that EPA Inspectors should verify on Page 6-16.
- 3) As noted above, the additional and more detailed drawings necessary for a facility need only be what is appropriately required to address the SPCC requirements and this is ultimately within the discretion of the PE.
- 4) Also as noted above, the location of the drawings may also be at a regional or corporate office but can be made available at a later date if necessary.

API Recommendations

- API has provided in the Recommendations to Section 2.10 a summarization of the Role of the EPA Inspector utilizing language from Section 1 - Introduction and Subsection 3.4.2. We recommend that the API Recommended Section 2.10 be utilized to either replace or streamline the Role of the EPA Inspector noted in this section.
- 2) At a minimum, add the word "fixed" to the first bullet on Page 6-16 and add "as appropriate" and "regional or corporate office" to the last paragraph as noted below.

Excerpt from Page 6-16

6.4.2 Role of the EPA Inspector

The inspector should verify that the diagram accurately represents the facility layout and provides sufficient detail as outlined in §112.7(a)(3), and use it as a guide for the containers and piping inspected during the site visit.

The EPA inspector should verify that the diagram included in the Plan includes:

- Location and contents of each [ADD THE FOLLOWING UNDERLINED TEXT] <u>fixed</u> container (except those below the <u>de minimis</u> container size of 55 gallons as described in Section 6.2.3, above).
- Completely buried tanks, including those that are otherwise exempt from the SPCC rule by §112.1(d)(4).
- All transfer stations and connecting pipes (allowing the flexibility as described in Section 6.2.6, above).

Although EPA generally stated in both the preamble of the 2002 SPCC rule (67 FR 47097) and in §112.7(a)(3) that all facility transfer stations and connecting pipes that handle oil must be included in the diagram, it is reasonable to allow flexibility on the method depicting concentrated areas of piping of manufacturing equipment on the facility diagram. These areas may be represented in a more simplified manner, as long as more detailed diagrams [ADD THE FOLLOWING UNDERLINED TEXT] as appropriate for the type of facility (such as blueprints, engineering diagrams, or process charts) are available at the facility [ADD THE FOLLOWING UNDERLINED TEXT] or at a regional or corporate office. The inspector may ask to review more detailed diagrams of piping and manufacturing equipment if further information is needed during a site inspection. [ADD THE FOLLOWING UNDERLINED TEXT] If such a request is made, the EPA inspector should ensure that the information requested is not considered confidential business information. An address should then be provided to the owner/operator for the purpose of mailing the diagram(s) to the EPA inspector after the inspection. If the requested information is indeed confidential business information, it must be handled in accordance with procedures specified in 40 CFR Part 2 Public Information, Subpart B, Confidential Business Information.

Chapter 7

7.2 Inspection, Evaluation, and Testing under SPCC Rule

7.2.1 Summary of Inspection and Integrity Testing Requirements (Page 7-2)

API Comment

1) API appreciates the emphasis put on the fact that production facilities are not subject to the integrity testing requirements of the SPCC rule. We request emphasis be given by appropriately placing the parenthetical "(other than oil production)" in the first paragraph of Section 7.2.1.

API Recommendation

1) Add the statement "(other than production)" in the first paragraph of 7.2.1 as follows:

Excerpt from page 7-2

7.2.1 Summary of Inspection and Integrity Testing Requirements

Table 7-1 summarizes the provisions that apply to different types of equipment and facilities. Some inspection and testing provisions apply to bulk storage containers at onshore facilities (other than production facilities). Inspection and/or testing requirements also apply to other components of a facility that might cause a discharge (such as vehicle drains, foundations, or other equipment or devices). Other inspection requirements also apply to oil production facilities. In addition, inspection, evaluation, and testing requirements are required under certain circumstances [ADD THE FOLLOWING UNDERLINED TEXT] (other than oil production facilities), such as when an aboveground fieldconstructed container undergoes repairs, alterations, or a change in service that may affect its potential for a brittle fracture or other catastrophe, or in cases where secondary containment for bulk storage containers is impracticable (§112.7(d), as described in Chapter 4 of this document.) Facility owners and operators must also maintain corresponding records to demonstrate compliance (§§112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1) and (2)) per §112.7(e).

7.2.2 Regularly Scheduled Integrity Testing and Frequent Visual Inspection of Aboveground Bulk Storage Containers (Page 7-6)

API Comment

- 1) For the reason explained in Section 7.2.1, API requests the statement "other than production facilities" be added to the title line of 7.2.2. API recommends adding another section, perhaps a new 7.2.3, which addresses periodic visual examinations for production facilities.
- API requests that the frequency of daily, weekly, and/or monthly be removed from the sentence that discusses the frequency of visual examinations (second paragraph of page 7-8). The rule does not specify the frequency of the visual examinations and should be determined by the PE. This issue has been adjudicated in litigation and we refer you to the settlement agreement between PMAA and EPA. See additional discussion in the write up for Section 3.1 regarding the PMAA settlement.
- 3) The term "certified inspector" gives the impression that all integrity testing must be certified despite the lack of such a requirement in the rule. API requests that the term be replaced with "trained personnel".

API Recommendation

- 1) Add "(other than production facilities)" to the title line of 7.2.2 (page 7-6).
- 2) Remove the words daily, weekly, and/or monthly from the last sentence of the second paragraph of page 7-8 and replace with "on a frequency determined by the PE".
- 3) Replace the term "certified inspector" in the last sentence of the second paragraph with "trained personnel".

Excerpt from page 7-6

7.2.2 Regularly Scheduled Integrity Testing and Frequent Visual Inspection of Aboveground Bulk Storage Containers [ADD THE FOLLOWING UNDERLINED TEXT] (Other than Production Facilities)

Excerpt from page 7-8

Frequent visual inspection. There must be a frequent inspection of the outside of the container for signs of deterioration, or accumulations of oil inside diked areas (§112.8(c)(6)). This visual inspection is intended to be a routine walk-around. EPA expects that the walk-around, which will occur on an ongoing routine basis, can generally be conducted by properly trained facility personnel, as opposed to the more intensive but less frequent visual inspection component of the non-destructive examination conducted by qualified testing/inspection personnel. Qualifications of these personnel are outlined in tank inspection standards, such as API 653 and STI SP-001. A facility owner or operator can, for example, visually inspect the outside of bulk storage containers on a [ADD THE FOLLOWING UNDERLINED TEXT] frequency determined by the PE. [DELETE THE FOLLOWING STRIKEOUT TEXT] daily, weekly, and/or monthly basis, and supplement this inspection with integrity testing (see above) performed by [ADD THE FOLLOWING UNDERLINED THE trained personnel, **FDELETE FOLLOWING** STRIKEOUT TEXT] a certified inspector with the scope and frequency determined by industry standards or according to a sitespecific inspection program developed by the PE.

7.2.3 Brittle Fracture Evaluation OF Field-Constructed Aboveground Containers (Page 7-8)

API Comment

1) For the reason explained in Section 7.2.1, API requests the statement "other than production facilities" be added to the title line of 7.2.3.

API Recommendation

1) Add "(other than production facilities)" to the title line of 7.2.3.

Excerpt from page 7-8

7.2.3 Brittle Fracture Evaluation of Field-Constructed Aboveground Containers [ADD THE FOLLOWING UNDERLINED TEXT] (Other than Production Facilities)

7.2.4 Inspections of Piping (Page 7-10)

API Comment

- 1) The August 16, 2002 date should be replaced with the new compliance date of October 31, 2007 to avoid any confusion during field inspections.
- 2) API agrees that aboveground piping, valves, and appurtenances at production facilities must be regularly inspected but notes that the rule does not require that they must be done in accordance with industry standards. We suggest removing the language that suggests that this is a requirement of the rule.
- 3) The last sentence of the section should be removed because it pertains only to piping associated with containers and not all piping at the facility.

API Recommendation

- 1) Change August 16, 2002 to October 31, 2007 in the first paragraph of Section 7.2.4. (See the excerpt below).
- 2) Remove the words "and in accordance with industry standards" from the first full paragraph on page 7-10 (See the excerpt below).
- 3) The last sentence of Section 7.2.4 is incorrect. The language only applies to containers outside secondary containment and their associated piping. Remove the last sentence of Section 7.2.4 to alleviate confusion that may occur by its inclusion in the section.

Excerpt from page 7-8

7.2.4 Inspections of Piping

For onshore facilities, the SPCC rule specifies the following inspection and testing requirements for piping. Buried piping at non-production facilities that has been installed or replaced on or after [ADD THE FOLLOWING UNDERLINED TEXT] <u>October 31, 2007</u>, [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>August 16, 2002</u> must have a protective wrapping and coating and be protected from corrosion cathodically or by other means, as per §§112.8(d)(1) and 112.12(d)(1). Any exposed line must be inspected for deterioration, and, if corrosion damage is found, additional inspection or corrective action must be taken as needed.

Aboveground valves and piping associated with transfer operations at production facilities must be inspected periodically and on a regular schedule, as per §112.9(d)(1) [DELETE THE FOLLOWING STRIKEOUT TEXT] and in accordance with industry standards. A

program of flowline maintenance is required by §112.9(d)(3) and is described in the following section of this document.

For offshore facilities, §112.11(n) specifies that all piping appurtenant to the facility must be protected from corrosion, such as with protective coatings or cathodic protection. Section 112.11(p) requires that sub-marine piping appurtenant to the facility be maintained in good operating condition at all times, and that such piping be inspected or tested for failures periodically and according to a schedule.

[DELETE THE FOLLOWING STRIKEOUT TEXT] *In addition, if the owner/operator determines that those required measures are not practicable, periodic integrity and leak testing of valves and piping must be conducted, as per §112.7(d).*

7.2.5 Flowline Maintenance (Page 7-10 and 7-11)

API Comment

- 1) This section applies only to production facilities and should be noted as such on the title line.
- 2) EPA makes several recommendations that regional inspectors may mistakenly consider requirements under the rule if included in this section. API feels that since the guidance document is written for EPA Inspectors then there is no need to make recommendations to industry. Therefore, we request that all recommendations be removed from the section, or at a minimum, re-locate them to a separate "Helpful Hints" appendix intended solely for that purpose.

API Recommendation

- 1) Add (Production Facilities Only) to the title line of 7.2.5
- 2) Either remove language that recommends or appear to instruct industry on how to develop and effective flowline maintenance program or re-locate it to a separate "Helpful Hints" appendix. The text we recommend deleting/moving is shown below.

Excerpt from page 7-10 and 7-11

7.2.5 Flowline Maintenance (Production Facilities Only)

The objective of the SPCC flowline maintenance program requirement (§112.9(d)(3)) is to help prevent oil discharges from production flowlines, e.g., the piping that extends from the pump/well head to the production tank battery. Common causes of

such discharges include mechanical damage (i.e., impact, rupture) and corrosion. A flowline maintenance program aims to manage the oil production operations in a manner that reduces the potential for a discharge. It usually combines careful configuration, inspection, and ongoing maintenance of flowlines and associated equipment to prevent and mitigate a potential discharge. [DELETE THE FOLLOWING STRIKEOUT TEXT BELOW - OR REMOVE TO A HELPFUL HINTS APPENDIX] EPA recommends that the scope of a flowline maintenance program include periodic examinations, corrosion protection, flowline replacement, and adequate records, as appropriate. EPA suggests that facility owner/operators conduct inspections either according to industry standards or at a frequency sufficient to prevent a discharge as described in §112.1(b). EPA is aware that API attempted to develop an industry standard for flowline maintenance, but the standard has not been finalized. However, according to practices recommended by industry groups, such as API, a comprehensive piping (flowline) program should include the following elements:

- Prevention measures that avert the discharge of fluids from primary containment;
- Detection measures that identify a discharge or potential for a discharge;
- Protection measures that minimize the impact of a discharge; and
- Remediation measures that mitigate discharge impacts by relying on limited orexpedited cleanup.

If a standard for flowline maintenance is developed, inspectors are encouraged to review this standard. At present, the details below serve to guide the inspector in reviewing the scope of a flowline maintenance program. If an impracticability determination under §112.7(d) is made for flowlines for secondary containment required by §112.7(c), EPA inspectors should extensively review the adequacy of the flowline maintenance program along with the contingency plan (67 FR 47078).

A flowline maintenance program should ensure that flowlines, associated equipment, and safety devices are kept in good condition and would operate as designed in the event of a discharge. The PE certifying the Plan will typically establish the scope and frequency of inspections, tests, and preventive maintenance based on industry standards, manufacturer's recommendations, and other such sources of good engineering practice.

Periodic Examination

Visual observation of the flowlines by facility personnel should be included as part of any flowline maintenance program and is of paramount importance for those facilities with flowlines that have no secondary containment and rely on rapid spill detection to implement a contingency plan in a timely manner. Facility personnel may "walk the flowlines" or perform aerial flyovers, if they are located aboveground, to detect any evidence of leakage. The visual inspection should cover the piping, flange joints, valves, drip pans, and supports, and look for signs of corrosion, deterioration, leakage, malfunction, and other problems that could lead to a discharge. The frequency of inspections can vary according to their scope, the presence of secondary containment, and the detection capability needed to ensure prompt implementation of a contingency plan (if no containment is present), and may include daily, monthly, quarterly, or annual inspections. [DELETE THE FOLLOWING STRIKEOUT TEXT BELOW - OR REMOVE TO ANOTHER SECTION] Regular visual inspection may be supplemented by periodic integrity testing using nondestructive evaluation methods, such as ultrasonic or other techniques to determine remaining wall thickness, or hydrostatic testing at a pressure above normal operating pressure. This guidance document refers to some relevant industry standards that describe methods used to test the integrity of piping, such as API 570 and ASME B31.4.

7.2.6 Role of Industry Standards and Recommended Practices in Meeting SPCC Requirements (Page 7-14)

API Comment

1) The reference to the 5 to 20 year interval should be removed since it can vary based the condition of the tank.

API Recommendation

1) Remove the statement "Intervals from 5 to 20 years" to reflect the current API 653 allowable interval schedule (see excerpt below).

Excerpt from page 7-14

Inspection	Certified inspections:		Same as API 653.	Scheduled and
interval	[DELETE THE	Inspection intervals and scope based on tank size and configuration. Owner inspections:		unscheduled internal and external inspections conducted as per Table 1 of the Recommended Practice.

7.3 Specific Circumstances (Page 7-16)

API Comment

- 1) This section is intended primarily for non production facilities except in instances where the rules of 112.7(d) apply to bulk storage containers. API suggests clarifying this in the title.
- 2) Change the language in the last sentence of the first paragraph to improve clarity.

API Recommendation

- 1) Add the statement "(Not applicable to Production Facilities except for Bulk Storage Tanks Covered by 112.7(d))" to the title line of Section 7.3.
- 2) Change the language in the last sentence of the first paragraph as follows:

Excerpt from page 7-16

7.3 Specific Circumstances [Not Applicable to Production Facilities Except for Bulk Storage Containers Covered by 112.7(d)]

Some facilities may not have performed integrity testing of their tanks. In this case, developing an appropriate integrity testing program will require assessing baseline conditions for these tanks. This "baseline" will provide information on the condition of the tank shell, and the rate of change in condition due to corrosion or other factors, in order to establish a regular inspection schedule. Section 112.7 requires that if any facilities, procedures, methods, or equipment are not yet fully operational, the SPCC Plan must explain the details of installation and operational start-

up; this applies to the inspection and testing programs required by the rule. For all types of facilities, the PE is responsible for [ADD THE FOLLOWING UNDERLINED TEXT] <u>determining</u> [DELETE THE FOLLOWING STRIKEOUT TEXT] <u>making the final determination on</u> the scope and frequency of testing [ADD THE FOLLOWING UNDERLINED TEXT] <u>if appropriate for the facility</u>, when certifying that a SPCC Plan is consistent with good engineering practice and is appropriate for the facility.

7.3.3 Deviation from Integrity Testing Requirements Based on Environmental Equivalence (Page 7-19)

API Comment

- 1) The reference to STI SP-001 in the last paragraph of section 7.3.3 is not appropriate. It appears as though it is a clerical error and should be removed.
- 2) API would like to emphasize the option for environmental equivalence for cathodic protection of new buried piping in consistent fashion with Section 3.3.5.

API Recommendation

1) Remove the reference to STI SP-001 as follows:

Excerpt from Page 7-20

not be measures already required to meet another part of the SPCC rule. A facility may not rely solely on measures that are required by other sections of the rule (e.g., secondary containment) to provide "equivalent environmental protection." Otherwise, the deviation provision would allow for approaches that provide a lesser degree of protection overall. However, for certain tank sizes and configurations of secondary containment, continuous release detection and frequent visual inspection by the owner/operator may be the sole inspection requirement, provided that the rationale is discussed in the Plan [DELETE THE FOLLOWING STRIKEOUT TEXT] (STI SP-001). This rationale should include a discussion of good engineering practice referencing appropriate industry standards.

2) Add most of the sentence from Section 3.3.5 (Protecting Buried Piping from Corrosion Damage, first paragraph) as follows: "When PE determines that cathodic protection of new piping is not appropriate considering site-specific conditions, facility

configuration, and other engineering factors, the PE may specify other measures to assess and ensure the continued fitness-forservice of piping."

7.3.4 Environmental Equivalence Scenarios for Shop-Built Containers (Page 7-20)

API Comment

The language that states that monthly visual inspection is required for elevated drums is incorrect as per the settlement agreement referenced in earlier API's comments (Section 3.1). The statement should be consistent with the settlement agreement, i.e. "appropriately inspected".

API Recommendation

 Change the inspection frequency discussed in the first paragraph of Section 7.3.4 from monthly inspections to "appropriately inspected" as noted below.

Excerpt from page 7-20

7.3.4 Environmental Equivalence Scenarios for Shop-Built Containers

Scenario 1: Elevated Drums. As EPA has indicated in the 2002 preamble to the revised SPCC rule, certain smaller shop-built containers (e.g., 55-gallon drums) for which internal corrosion poses minimal risk of containment requirements for failure, which are [ADD THE FOLLOWING UNDERLINED TEXT] _appropriately inspected [DELETE THE FOLLOWING STRIKEOUT TEXT] at least monthly, and for which all sides are bulk storage in §112.8(c)(2) visible (i.e., the container has no contact with the ground), visual inspection alone might be considered to provide equivalent environmental protection, subject to good engineering practice (67 FR 47120). In fact, certain industry standards also reference these conditions as good engineering practice. For example, elevating storage drums on an appropriately designed storage rack (as shown in Figure 7-2) such that all sides are visible allows the effective visual inspection of containers for early signs of deterioration leakage, and therefore considered and is environmentally equivalent to the requirement for integrity testing beyond visual inspection for these smaller bulk storage containers. Note that the drums, even if elevated, remain subject to the bulk storage secondary containment requirements in §112.8(c)(2) or §112.12(c)(2). Determination of environmental equivalence is subject to good engineering practice, including consideration of industry standards, as certified by the PE in accordance with §112.3(d).

7.4 Documentation Requirements and Role of the EPA Inspector (Page 7-22 and 7-23)

API Comment

- 1) As noted in Section 7.3, this section is intended primary for non production facilities except in instances where the rules of 112.7(d) apply to bulk storage containers. API suggests clarifying this in the title.
- 2) API disagrees with the statement made in the last sentence of the second paragraph of Section 7.4. The responsibility of determining whether a program was developed using a sound inspection standard and based on appropriate engineering principles lies with the PE and not the EPA Inspector as the sentence suggests.
- 3) Emphasis should be given to the option of using of electronic recordkeeping if that is the usual and customary business practice of the facility. This option is discussed on page 73536 of the preamble of the 2005 proposed SPCC rule.
- 4) The PE is the most qualified person to make the determination of the best integrity program to use at the facility but the language in the last paragraph gives too much discretion to the EPA Inspector.

API Recommendation

- 1) Add the statement "(Not applicable to Production Facilities except for Bulk Storage Tanks Covered by 112.7(d))" to the title line of Section 7.3.
- 2) Revise the last sentence of the second paragraph of Section 7.4 to emphasize the PE's role in developing an integrity program as noted in the excerpt below.
- 3) Revise the language on the first paragraph of page 7-23 to include electronic record keeping as usual and customary business practices.
- 4) Remove the sentence that takes the ultimate discretion away from the PE in determining the most appropriate integrity program for the facility. Refer to the last paragraph of the excerpt below for clarification.

Excerpt from page 7-22

7.4 Documentation Requirements and Role of the EPA Inspector [Not Applicable to Production Facilities Except for Bulk Storage Containers Covered by 112.7(d)]

A hybrid testing program may be appropriate for a facility where an industry inspection standard does not yet contain enough specificity for a particular facility's universe of tanks and/or configuration, or while modifications to an industry inspection standard are under consideration. For example, a tank user may have made a request to the industry standard-setting organizations recommending a change or modification to a standard. Both API and STI have mechanisms to allow tank users (and the regulatory community) to request changes to their respective inspection standards. In this case, the modification to a standard may be proposed, but not yet accepted by the standard-setting organization. In the meantime, the facility is still subject to the SPCC requirements to develop an inspection and testing program. In this scenario, a hybrid inspection and testing program may be appropriate. When reviewing the scope and schedule of a hybrid program, the inspector should [ADD THE FOLLOWING UNDERLINED TEXT] ensure that a PE has attested that it has been developed in accordance with sound engineering principles and is being implemented at the facility. IDELETE THE FOLLOWING STRIKEOUT TEXT] review whether an industry inspection standard and appropriate good engineering practices were used in the development of the hybrid program.

The facility must maintain records of all visual inspections and integrity testing, as required by the SPCC rule in §§112.7(e), 112.8(c)(6), 112.9(c)(3), and 112.12(c)(6). Records do not need to be specifically created for this purpose, and may follow the format of records kept under usual and customary business practices [ADD THE FOLLOWING UNDERLINED TEXT] *including electronic records*. These records should include the frequent inspections performed by facility personnel. Also, industry standards generally provide example guidelines for formal tank inspections, as well as sample checklists. The EPA inspector should review the inspection checklists used by the facility to verify that they cover at least the minimum elements and are in accordance with the PEcertified inspection and testing program. The tank inspection checklist from Appendix F of 40 CFR part 112, reproduced as Table 7-6 at the end of this chapter, provides an example of the type of information that may be included on an owner/operator-performed inspection checklist.

By certifying an SPCC Plan, the PE attests that the Plan has been prepared in accordance with good engineering practice, that it meets the requirements of 40 CFR part 112, and that it is adequate for the facility.

Thus, if testing, evaluation, or inspection procedures have been reviewed by the certifying PE and are properly documented, they should generally be considered acceptable by the EPA inspector. [DELETE THE FOLLOWING STRIKEOUT TEXT] However, if testing, evaluation, or inspection procedures do not meet the standards of common sense, appear to be at odds with recognized industry standards, do not meet the everall objective of oil spill response/prevention, or appear to be inadequate for the facility, appropriate follow-up action may be warranted. In this case, the EPA inspector should clearly document any concerns to assist review and follow-up by the Regional Administrator. The EPA inspector may also request additional information from the facility owner or operator regarding the testing, evaluation, or inspection procedures provided in the Plan.

7.5 Summary of Industry Standards and Regulations

7.5.15 Suggested Minimum Requirements for a PE-Developed Site-Specific Integrity Testing Program (Hybrid Testing Program) (Page 7-38 and 7-39)

API Comment

- 1) API feels that this section should be divided into two parts. The first paragraph could be should be moved to Section 7.3 where it will provide valuable information about hybrid programs earlier in the section. The second part of the section should be moved to a separate "Helpful Hints" appendix with the recommendations as suggested earlier in this response.
- 2) As described in Section 3.1, there is no requirement to inspect on a monthly basis as suggested in the EPA's recommendations on page 7-40. All references to inspection frequencies should be "appropriately inspected".

API Recommendation

- 1) Remove the entire section from this location by re-locating the title heading and the first paragraph to Section 7.3 and re-locating the balance of the section to the separate "Helpful Hints" appendix proposed earlier in this response.
- 2) Exchange the words "(e.g., monthly)" with "(as determined appropriate by the PE)" as noted in the following excerpt.

Excerpt from page 7-40

[MOVE THE FOLLOWING PARAGRAPH AND TITLE HEADING TO SECTION 7.3]

7.5.15 Suggested Minimum Requirements for a PE-Developed Site-Specific Integrity Testing Program (Hybrid Testing Program)

Although EPA refers to certain industry standards for inspection and testing, it does not require that inspections and tests be performed according to a specific standard. The PE may use industry standards along with other good engineering principles to develop a customized inspection and testing program for the facility (a "hybrid inspection program"), considering the equipment type and condition, characteristics of products stored and handled at the facility, and other site-specific factors.

For example, a hybrid...

[MOVE THE REMAINING PARAGRAPHS TO A HELPFUL HINTS APPENDIX AND MAKE THE FOLLOWING MODIFICATION]

EPA also recommends that the hybrid inspection program include frequent [ADD THE FOLLOWING UNDERLINED TEXT] (as determined appropriate by the PE), [DELETE THE FOLLOWING STRIKEOUT TEXT] (e.g., monthly) visual examinations of the tank by the tank owner. Such an examination may include the following elements:

- Foundation: Structurally sound and there is adequate drainage away from tank (yes/no)
- Tank bottom: Shows visible signs of leakage (yes/no)
- Tank shell: Shows distortions, visible leaks, seepage at seam, external corrosion (yes/no)
- Condition of coatings and insulation (satisfactory/unsatisfactory)
- Roof: Hatches securely closed, roof distortions, visible signs of holes, external corrosion, adequate drainage (yes/no)
- Condition of coatings and insulation (satisfactory/unsatisfactory)
- Appurtenances: Thief hatch seals properly; thief hatch operational; vent valve operational; drain and sample valves do not leak; piping properly supported off tank; stairways, ladders, and walkways sound (yes/no)
- Miscellaneous: Cathodic protection and automatic tank

gauging is operational, tank area is clean of trash and vegetation (yes/no)

The EPA Inspector may review checklists used by facility personnel to conduct the frequent [ADD THE FOLLOWING UNDERLINED TEXT] (e.g., as determined by the PE), [DELETE THE FOLLOWING STRIKEOUT TEXT] (e.g., monthly) inspections.